

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A fastener comprising:
a polymeric first portion having a flexible skirt and at least two support posts distally extending from a first side of the flexible skirt; and
a metal second portion ~~bonded~~ including a single central body portion defining a plane having an edge partially embedded in the support posts to non-releasably connect the second to the first portion, the second portion having ~~a plate portion defining a plane and~~ at least two deflection wings extending from the plate central body portion and entirely free from the first portion on the first side of the flexible skirt and oppositely extending about the plane, and at least one substantially U-shaped member freely extending from a second side of the flexible skirt, ~~the first and second portions together defining a unitary insert molded fastener having the first portion integrally joined to the second portion.~~

Claims 2-3 canceled

4. (original) The fastener of Claim 1, wherein each deflection wing comprises:
a fixed end integrally joined to a distal end of the second portion;
and
a displaceable end;
wherein the displaceable end of a first one of the deflection wings is spatially separable from the displaceable end of a second one of the deflection wings.

5. (original) The fastener of Claim 4, wherein each deflection wing comprises:
- a first bend adjacent the distal end of the second portion;
 - a deflection wing body angularly directable by the first bend away from a plane formed in parallel with the distal end of the second portion; and
 - a second bend located at a junction between the deflection wing body and the displaceable end, the second bend angularly directing the displaceable end toward the support posts.
6. (original) The fastener of Claim 5, comprising:
- the first one of the deflection wings being positionable on a first side of the plane formed in parallel with the distal end of the second portion; and
 - the second one of the deflection wings being positionable on a second side of the plane formed in parallel with the distal end of the second portion.
7. (original) The fastener of Claim 4, comprising a plate portion adjacent the distal end of the second portion, the plate portion operable to integrally support the fixed end of each deflection wing.
8. (currently amended) The fastener of Claim 7, comprising a bridge transversely joining a distal end of each of the support posts, the plate portion partially and fixedly received within the bridge ~~being insert moldable with the plate portion.~~
9. canceled
10. (original) The fastener of Claim 1, wherein each of the distal ends of the support posts comprise a beveled end.
11. (original) The fastener of Claim 1, wherein each U-shaped member comprises at least one toothed retention element.

12. (currently amended) A one-piece apparatus for joining accessories to vehicles, the apparatus comprising:

a polymeric first portion including:

a flexible skirt;

a pair of support posts extending substantially perpendicularly from a side of the skirt, each of the support posts including a flange; and

a bridge ~~co-moldable with and integrally~~ homogenously joining distal ends of each of the support posts; and

a metallic second portion including ~~an end~~ a single substantially planar central body portion having an edge ~~inserted~~ partially embedded into the flange of each of the support posts ~~to a depth, selectable to operably bond~~ non-releasably connecting the second portion ~~within~~ to the flange of the support posts, the ~~end~~ second portion ~~having further including~~ a pair of integrally connected metallic deflectable wings, the deflectable wings extendable toward the flexible skirt and entirely free from the first portion, the first and second portions ~~when molded together~~ defining a unitary insert ~~molded~~ fastener having the first portion inseparable from the second portion.

13. (original) The apparatus of Claim 12, wherein the second portion comprises a head having at least one engagement member.

14. (currently amended) The apparatus of Claim 13, wherein the ~~second portion comprises a central portion insert moldable with the support posts, the central portion~~ is further integrally joined to the head and ~~extending~~ extends from the head through the flexible skirt.

15. (original) The apparatus of Claim 13, wherein each engagement member comprises:

a substantially U-shaped clip having an open end facing away from the flexible skirt; and

a bight formed between a junction of an opposed pair of clip bends, the bight including at least one barb.

16. (original) The apparatus of Claim 12, wherein the polymeric first portion comprises a polyamide material.

17. (original) The apparatus of Claim 12, wherein the metallic second portion comprises a stainless steel.

18. (currently amended) A fastener system, comprising:
a vehicle body panel;
a ~~one-piece~~ fastener having a metallic portion ~~insert moldable with~~ and a polymeric ~~moldable~~ portion, ~~the metallic portion integrally bonded to the polymeric molded portion;~~
at least one U-shaped member of the metallic portion ~~operably receiving~~ adapted to receive a fixed rib connectably joined to a trim piece;
a pair of support posts ~~insert moldable with~~ extending from the ~~moldable~~ polymeric portion and operably engageable within a substantially rectangular aperture of the body panel; and
an edge of the metallic portion ~~inserted partially into~~ embedded into and integrally non-releasably attached to each of the pair of support posts defining a unitary fastener member;
a pair of deflectable wings integrally connected to the second portion, the deflectable wings extendable toward the flexible skirt;
wherein the deflectable wings ~~operably~~ are oriented entirely free from the first portion and adapted to deflect toward each other upon penetration of the support posts within the aperture and expand away from each other by spring force to releasably engage the fastener with the body panel.

19. (original) The system of Claim 18, wherein the at least one U-shaped member comprises a pair of U-shaped members, each having a bight section to releasably engage the trim piece.

20. (original) The system of Claim 19, wherein the bight section includes at least one barb.

21. (original) The system of Claim 19, comprising a central barb formed between the pair of U-shaped members.

22. (original) The system of Claim 18, wherein each of the support posts comprises a beveled end for operable alignment with the rectangular aperture.

23. (original) The system of Claim 18, wherein each of the support posts includes a width smaller than a rectangular aperture width permitting an angular rotation of the support posts within the rectangular aperture.

24. (currently amended) The system of Claim 18, wherein the ~~moldable~~ polymeric portion includes a flexible skirt operably contacting the vehicle body panel in a fully engaged position of the one piece fastener.

25. (currently amended) The system of Claim 18, wherein the fixed rib is ~~insert moldable with~~ homogenously connected to a doghouse assembly, the doghouse assembly being positionable between the fixed rib and the trim piece.

26. (original) The system of Claim 18, wherein the deflectable wings operably deflect upon penetration of the support posts within the aperture with an insertion pressure of up to 15 pounds.

27. (original) The system of Claim 18, comprising a fastener insertion pressure of at least 10 pounds.

28. (original) The system of Claim 18, comprising a minimum fastener removal pressure of 35 pounds.

29. (withdrawn) A method of making a one-piece fastener for joining an automotive trim piece to an automobile body, the method comprising:
molding a body portion including:
shaping a substantially oval flexible skirt; and
extending a pair of support posts substantially perpendicularly from the skirt; and
insert molding a metallic body portion with the moldable body portion, including:
forming a pair of metallic deflectable wings on a first side of the flexible skirt adjacent to the support posts; and
locating a metallic U-shaped member on a second side of the flexible skirt.

30. (withdrawn) The method of Claim 29, comprising connectably joining a moldable bridge between distal ends of each of the support posts.

31. (withdrawn) The method of Claim 29, comprising partially insert molding an end portion of the metallic body portion into the bridge.

32. (withdrawn) The method of Claim 31, comprising freely extending the pair of deflectable wings from the end portion.

33. (withdrawn) The method of Claim 32, comprising orienting distal free ends of the deflectable wings toward the flexible skirt.

34. (currently amended) The fastener of Claim 1, wherein each support post further comprises:

a flange; and

an outer web ~~co-moldable with~~ homogenously connected to the flange, the outer web oriented substantially perpendicular to the flange and extending outwardly relative to the second portion;

wherein ~~an~~ the edge of the second portion is ~~inserted partially~~ partially embedded into each of the flange and the outer web ~~and operably defines an insert molded connection of the second portion and the support post.~~